# New Partnerships, Markets, & Infrastructure for Water





## **Bobby Cochran, Willamette Partnership** www.willamettepartnership.org

# Our water infrastructure needs are significant

- \$335 and \$298 billion needed to update drinking and wastewater infrastructure;
- Lots of people manage that infrastructure, making it difficult to change; and
- To pay for this is a significant burden on families.







## Dirty water is wasted water

- "Wastewater" is looking to be "resource recovery"
- Nitrates in groundwater drive communities to look for surface water sources to drink

## Timing of water availability matters

- Too much water in the Winter and Spring
- Not enough water in the Summer and Fall



## Public-private partnerships can help

#### **West Coast Infrastructure Exchange**

- Aggregating small projects to attract financing
- Educating private and public partners
- Motivations for cost-effective design and operations
- Helping reduce regulatory and investment risk

#### **Green Infrastructure investments**

- Drinking water source protection
- Water quality trading
- Linking health and the outdoors



#### **Green Infrastructure is**





### Wastewater infrastructure

## Tualatin River, Oregon



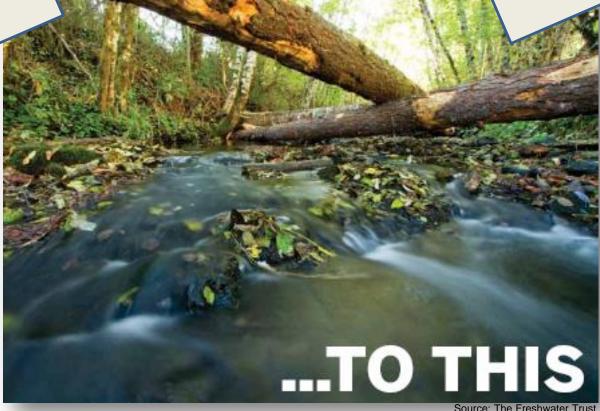
Restoration for compliance, converting...

**Cooling Towers** 

35 miles of restoration Additional instream flow







## Summer, 2004





## Summer, 2007





## Summer, 2010





## Three keys to success

#### **Environmental Markets**

- CLEAR DEMAND: Law/regulation, businesses, or funders that are on board
- CLEAR RISK: Someone in charge if something goes wrong
- CLEAR PATH: Approved standards and protocols for measuring environmental benefits and implementing projects



#### **Green Infrastructure is**





## **Drinking water infrastructure**

#### **CHANGE IT:** MAKING THE BUSINESS CASE

#### Present value of investment over 20 years, USD millions

Most optimistic scenario (Portland, Maine; USA)



#### **Green infrastructure is**





### Health infrastructure



## **Healthy environments**

November 14 the Wingspread Declaration on Health and Nature will be released with 27 other leaders from health and conservation at the World Parks Congress & APHA



#### Wingspread Declaration on Health and Nature

July 26, 2014

Nature and human well-being are connected:

The connection between people and the natural world is fundamental to human health, well-being, spirk, and sunvival. Nature is a source of food, clean water, clean air, medicine, shelter, and aconomic opportunity. Moreover, in order to thrive, humans require direct access to nature. Whether a city park, a community gerden, a tree-lined street, or wilderness - nature in people's daily liver neduces street, renews the spirit, connects people to each other and increases physical activity, in short, humans are part of nature, our connection with nature is a fundamental human need, and we believe scoose to nature is a basic right. signatures

Bradford S. Gentry Professor in the Practice

Yale School of Forestry & Environmental Studies and Yale School of Management

Christopher A. Smith Senior Program Officer Colorado Health Foundation

Cynthia West Associate Deputy Chief USDA Forest Service, Research and Development

Elizabeth Ward Director of Communications Land Trust Alliance

Elizabeth G. Love Program Officer Houston Endowment Inc.

Eugene Grigsby President and CEO National Health Foundation

Forrest Berkley Excess Return Fund

Howard Frumkin Dean University of Washington School of Public Health

Jay Espy Executive Director Karen Tuddenham

Masters of Environmental Management Yale School of Forestry and Environmental Studies

Kim Elliman President and CEO Open Space Institute

Kristin Wheeler Program Manager Institute at the Golden Gate

Lisa Sockabasin Director, Office of Minority Health Maine CDC, Dept. of Health and Human Services

Marc Smiley Principal Solid Ground Consulting

Marcie Tyrie Berkley Board of Directors Maine Huts and Trails & The Fenn School

Naomi Sachs Founding Director Therapeutic Landscapes Network

Perry Robinson Managing Director Greenwich BioMedical Inc. Raymond Baxter Senior Vice President,

Community Benefit, Research, and Health Policy Kaiser Permanente

Robert Zarr Pediatrician Unity Health Care, INC

Rue Mapp Founder and CEO Outdoor Afro

Sarah Milligan-Toffler Executive Director Children and Nature Network

Stacy Bare Director Sierra Club Outdoors

Wendy Jackson Executive Director Freshwater Land Trust

William Bird Family Doctor CEO of Intelligent Health, UK

William Rogers President and CEO The Trust for Public Land

Bobby Cochran Executive Director Willamette Partnership



#### Water finance trends to watch

- Better ability to aggregate small projects for private finance
- Financing for performance
- Expanding state & federal definitions for green infrastructure
- Healthcare paying attention to water and climate
- Higher resolution data, increasing the ability to target performance



#### Changing the world begins with changing



how we think about conservation

www.willamettepartnership.org